Synopsis of Requirements for 100-1000 KG/MO "Small Quantity Generators"

The "Small Quantity Generator" (SQG) is described as those generators who generate more than 100 kg but less than 1000 kg of hazardous waste during a calendar month, or generate less than 1 kg of acute ("P-list") hazardous waste in a month, and who never accumulate more than 6000 kg of hazardous waste at any time. Management of SQG waste is regulated under the general requirements of 40 CFR Part 262, as adopted by reference into the Virginia Hazardous Waste Management Regulations (VHWMR).
This generator category may be more likely than any other to have difficulty maintaining compliance with the regulations. Large generator facilities often have specialized environmental staff or corporate resources to assist them to maintain compliance. Conditionally exempt small quantity generators have very few compliance requirements other than waste identification and proper management off-site. The SQG category, on the other hand, is often a small business that may have limited resources and staff time to ensure that all compliance requirements are met. The SQG may also be a frequent "episodic" generator, normally operating as a CESQG but due to waste production increases or temporary conditions, they episodically generate sufficient waste to move into the higher category of regulation for a few months out of the year.
Most SQG compliance problems are usually the result of four major areas of inattention:

1. Failure to identify and properly count hazardous wastes
2. Failure to recognize and act upon your compliance responsibilities
3. Failure to rigorously and frequently self-assess your facility's compliance program
4. Failure to react to correct compliance problems when they are noted

The following summary will assist SQGs to develop and assess their programs to maintain compliance with the VHWMR.
Please note that this is a brief instructional summary for compliance assistance purposes only. Generators are solely responsible for their own compliance, and are encouraged to review the complete VHWMR and federal regulations, or retain the services of an environmental consultant or attorney, or check with appropriate DEQ hazardous waste program staff if they have questions about applicability of the regulations to their waste management program.
1. **IDENTIFY types and quantities of hazardous waste produced (generated) by your business**. Generators must identify their hazardous wastes in accordance with 40 CFR Part 262.11 and Part 261. Any solid waste (which may be a solid, sludge, liquid, or contained gas; and is any spent, used, discarded, abandoned, or no longer useable material) generated by your business must be evaluated to determine if it is a hazardous waste, either listed or by a hazardous waste characteristic.
Generators may use knowledge of their waste to make such determination or have it tested. However, it is recommended that generators exercise caution when using a knowledge based determination for any waste that may be hazardous because of a characteristic, particularly if the waste is known to contain hazardous constituents or exhibit hazardous properties. Generators who claim that such a waste is non-hazardous are advised that analysis in accordance with SW-846 may be the only certain way to demonstrate that the waste has been properly characterized.
Generators must count their total hazardous waste generated in any calendar month. Generator category is based on total waste weight, not volume. For estimation purposes, 100 kg to 1000 kg of waste is approximately half of a 55-gallon drum to 5 full drums of material equivalent to the weight of water. However, waste consisting of solids, sludges, or heavy-weight materials (e.g. paint) will reach the SQG weight limits in much less volume.
2. Obtain an **EPA identification number** by registration with the Department of Environmental Quality or EPA through "NOTIFICATION OF HAZARDOUS WASTE ACTIVITY" (EPA Form 8700-12).
3. **ACCUMULATE** hazardous waste only in containers (drums), tanks, drip pads, or containment buildings.
Container requirements may be found at 40 CFR Parts 262.34(d), 265.170- 265.174, and 265.177. Containers must be marked or labeled with the words "HAZARDOUS WASTE" and the date accumulation

begins. Containers must be in good condition and kept closed during accumulation. Containers must be compatible with the waste stored in them. Facilities subject to Subpart CC regulation are required to use only DOT approved containers and any covers or closure devices must be secured while waste is in accumulation. SQGs may also accumulate hazardous wastes under satellite accumulation conditions (See: "What is satellite accumulation?"). Do not mix incompatible wastes together in the same container. Tank requirements may be found at 40 CFR Part 262.34 (d) and 265.201. In general, tanks must be marked with the words "HAZARDOUS WASTE" and inspected daily. Depending on their use, additional tank requirements may apply. SQGs operating tanks are advised to review the applicable tank regulations. Do not mix incompatible wastes together in tanks.
Drip pads are a part of wood preserving facilities regulated under 40 CFR 265 Subpart W. **Containment Buildings** (40 CFR 265 Subpart DD) are not in common usage. Generators using these units are strongly advised to review their specific requirements.
4. DO NOT ACCUMULATE HAZARDOUS WASTE FOR MORE THAN 180 DAYS. However, you may accumulate hazardous waste for up to 270 days only if it will shipped to a treatment, storage, or disposal facility greater than 200 miles away - if this is the case, generators are advised to maintain records or make demonstrations indicating that they have contracted services with such a facility before the waste has been on-site for 180 days.
5. **NEVER ACCUMULATE MORE THAN 6000 KG OF HAZARDOUS WASTE** (or more than 1 kg of acute hazardous waste).
6. **EMERGENCY PREPAREDNESS**

- Designate an **Emergency Coordinator** - the emergency coordinator must respond to any emergencies that arise
- **Post emergency information** next to the telephone.
  - Name and telephone number of the emergency coordinator
  - Location of fire and spill control equipment
  - Fire alarm location
  - Fire Department phone number
- **Instruct** all employees involved in hazardous waste handling and emergency procedures, and ensure that they are thoroughly familiar with proper procedures relevant to their waste management responsibilities.
- **Inspect** waste container accumulation areas weekly, daily for tanks, and as required for other units.

7. Ship hazardous waste off-site accompanied by a **UNIFORM HAZARDOUS WASTE MANIFEST**.

- Use only approved treatment, storage, or disposal facilities.
- Transporters must hold a valid Virginia Hazardous Waste Transporter Permit.
- Prepare waste for shipment in accordance with DOT requirements for proper containers and labeling. Your transporter/disposal contractor may assist you in meeting these requirements and preparing the manifest. However, the generator ***always*** holds ultimate responsibility to ensure that all requirements are met.
- Ensure that Land Disposal Restricted (LDR) wastes are properly identified and that the appropriate notifications accompany the manifest. There is no standardized form document issued by the state or required under federal regulations for this requirement. Most waste disposal contractors provide their own forms.

Virginia does not use a state issued manifest. The standard federal manifest, EPA Form 8700-22, is the proper document to use. Some states will require generators to use their state manifest if the destination TSD is located in their state. Virginia accepts these as valid if they conform to the EPA Form 8700-22 format. Also, **Virginia does NOT require generators to submit the "State Copy" of the manifest to DEQ.**
8. **MAINTAIN RECORDS** as required, including all hazardous waste management related manifest copies, test or analysis results, inspection logs, annual reports, Department letters, contract recycling

agreements, etc. All records must be kept on file for a minimum of three years. It is recommended that certain records, such as manifests, be maintained for as long as the facilities operate.
The primary responsibility of all business owners is to identify the types and quantities of hazardous waste generated by their operations. Your trade association, product supplier, or product manufacturer may assist you with information in identifying hazardous wastes generated by your business. You may also find the Material Safety Data Sheets (MSDS's) available for most commercial chemical products useful to determine if product wastes may be hazardous.
Mixing hazardous waste with any other waste material may cause the entire mixture to be regulated as hazardous waste. Above all, to avoid possible serious compliance difficulties, **DO NOT MIX REGULATED HAZARDOUS WASTE WITH ANY OTHER SOLID WASTE !**

Automotive Maintenance and Dry Cleaning SQGs

Automotive maintenance and dry cleaning businesses comprise two of the largest business segments of the SQG universe. Businesses in these categories should be aware of special considerations for several of their waste streams.
Certain wastes produced in the auto maintenance industry may not be regulated as hazardous waste, or are conditionally exempted from regulation as hazardous waste only if they are managed within certain guidelines. These include lead-acid batteries that are stored intact and are to be reclaimed/recycled, scrap metal that is to be reclaimed, tires and asbestos containing materials (regulated as a special solid waste but not as a hazardous waste), and used antifreeze that does not exhibit a characteristic. It is recommended that used antifreeze be collected for recycling/reclamation. However, some localities permit discharge of small amounts through the municipal wastewater treatment system (you must check with your local water treatment authorities). Other automotive wastes may be subject to reduced regulations, including used oil and used oil filters. Waste gasoline or other fuels are usually subject to regulation as hazardous waste unless they are being actively reclaimed as legitimate commercial product fuels. The generator must make an active effort to properly accumulate and recycle these wastes as usable products, and not treat them as abandoned materials, if he intends to claim any conditional exclusion from regulation.
Most dry cleaners use Perc (perchloroethylene or tetrachloroethylene). Any waste cartridge filters, contact water (unless legitimately disposed of to a POTW, with proper permissions), still bottoms, contaminated absorbents, or other waste materials contaminated with spent Perc are regulated as hazardous wastes. However, some dry cleaning plants use Stoddard solvent (also known as 140 F solvent or petroleum naptha). If the residues from Stoddard solvent do not exhibit an ignitable characteristic, e.g. well drained filters with no free liquids, they are not regulated as hazardous waste. Also, there is a new type of dry cleaning equipment that uses super-critical fluid extraction technology based on a liquid form of carbon dioxide. Waste produced from this process would not be expected to have a hazardous characteristic and therefore would not be regulated as a hazardous waste.
Universal Wastes

- Certain wastes produced by businesses may be managed as Universal Waste, including batteries (except for lead-acid type, which are exempted from regulation if reclaimed), mercury switches, pesticides, and mercury containing lamps. These wastes may be "conditionally exempted" from many of the requirements for regulated hazardous wastes if they are managed as Universal Wastes. However, they still require special handling in accordance with the Universal Waste Rule and may not be routinely discarded in landfills as non-hazardous if they exhibit hazardous waste characteristics. Please see: (Fluorescent lights / mercury-containing lamps (universal waste) guidance)

Empty Containers

Once they meet the definition of empty, containers with small amounts of hazardous residues are generally not considered to be regulated hazardous waste (see 40 CFR Part 261.7). They are regulated as a solid waste when disposed. VA Solid Waste Regulations also require that drums or bulk containers be properly cleaned, open at both ends and crushed. A container is considered RCRA "empty" when all wastes have been removed by using common industrial transfer practices, and no more than one inch of

residue remains in the container (or <3 % of the volume). If the container is >110 gallons, then it may contain no more than 0.3% of residue. Triple rinsing requirements apply to containers holding acutely hazardous wastes. Containers holding compressed gases are considered empty when the gas ***product contents*** have been used and the container is at atmospheric pressure. However, aerosol cans using a compressed gas propellant are considered empty when the container meets the empty condition for the product contents. For example, a spray can that is full of solvent-based paint or ether starting fluid, but that has no remaining propellant gas pressure, may still be considered a hazardous waste. Releasing a compressed hazardous gas to the atmosphere or allowing container contents to evaporate to make the container empty is NOT allowed. Also, if "empty" containers are mismanaged so that they generate a secondary waste (e.g., empty containers with hazardous residues are allowed to accumulate rainwater) the secondary waste stream will be subject to regulation if it is characteristically hazardous.

Hazardous Waste Treatment in Tanks and Containers

Under certain controlled conditions, generators may be allowed to treat their own hazardous waste in tanks or containers located on-site. Hazardous waste may be treated in tanks or containers only, using the appropriate treatment technology specified under 40 CFR Part 268, in a Clean Water Act regulated wastewater pre-treatment unit, or unit excluded under 40 CFR Part 270.1. Treated waste must be chemically analyzed to ensure that it meets Land Disposal Restriction (LDR) treatment levels before disposal. ***Be aware that most listed hazardous wastes are not rendered non-listed by any treatment method, and may still have to be managed at an approved RCRA Subtitle C treatment, storage, or disposal facility***. Any characteristic waste that is treated and "decharacterized" will have to meet treatment levels for all of its LDR constituents before it is suitable for disposal at a Subtitle D facility. Most waste treatments are associated with wastewater treatment in a Clean Water Act permitted pre-treatment unit, with subsequent discharge of the treated water to a POTW. Any sludges or residues from the treatment process are subject to management as hazardous waste.

Generators may also legitimately reclaim some of their own wastes in reclamation units located on the site of waste generation, such as solvent reclaim stills, or by other processes, such as precious metal reclamation. In general, the waste must be only that generated on the site where reclamation occurs. A treatment permit is not required for most reclamation processes applied to waste generated and reclaimed on the same site. However, generators considering reclaiming their wastes from off-site should be aware that this is generally a permit regulated activity. Again, most residues from waste reclamation processes are likely to require management as a hazardous waste.

Any proposed treatment requires careful consideration and knowledge of the regulations by the generator, and an extremely cautious approach to ensure that the treatment process and management of the residues is in accordance with the regulations. **SQGs must bear in mind that hazardous waste treatments are only allowed within certain restrictions, the treatment must be legitimate and in accordance with Part 268 (or Part 270 exclusions), and must be for the purpose of achieving the land disposal treatment standard or legitimate reclamation. The waste may not be diluted or intentionally mixed with solid waste, dumped or spread on the ground, abandoned, burned, incinerated, evaporated, or buried on-site.**

If you have any questions about waste identification, treatment/storage/disposal facilities, transporters, recycling, or specific regulatory requirements, please check with your DEQ Regional Office.

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Revision 11/16/01 (orig. 8/23/88, rev. 4/8/93 and 12/2/10)